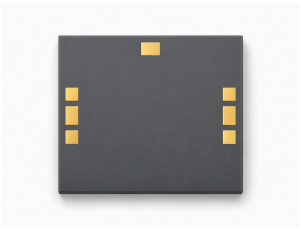
6000–18000 MHz GaN MMIC Power Amplifier Die

LCI-PA-6000-18000-PS27T is a GaN MMIC power amplifier supplied as bare die for 6000–18000 MHz. It supports CW and pulsed operation.

The RF table specifies: Saturated output power: 27 dBm (typical); Power gain: 9 dB (typical). RF test conditions: TA = +25 °C; Vd = +28 V; Pin = 18 dBm; °CW. Die dimensions: 1.5 × 1.3 × 0.1 mm.



RF characteristics

TA = +25 °C; Vd = +28 V; Pin = 18 dBm; °CW

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Operating frequency	f	6000	-	18000	MHz
Saturated output power	Psat	26	27	29	dBm
Power gain	Gp	8	9	11	dB
Power-gain flatness	ΔGp	-	-	±1.5	dB
Small-signal gain	S21	9	10	12	dB
Small-signal gain flatness	ΔS21	-	-	±2	dB
Input VSWR	VSWR(in)	-	2	2.5	-

DC bias and current

TA = +25 °C

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Drain voltage	Vd	-	28	32	V
Quiescent drain current	Id	-	0.14	-	A
Dynamic drain current	Idd	-	0.14	-	A

Absolute limits

Absolute limits; these are not normal operating targets.

Parameter	Symbol	Minimum	Typical	Maximum	Unit
Maximum drain-source voltage	Vd	-	-	32	V
Maximum input power	Pin	-	-	23	dBm
Maximum channel temperature	Top	-	-	225	°C
Storage temperature	TSTG	-65	-	150	°C

Die dimensions

Parameter	Value	Unit
Die dimensions	1.5 × 1.3 × 0.1	mm
Plan-view outline tolerance	±100 (Plan-view outline only; the source does not specify thickness tolerance.)	µm

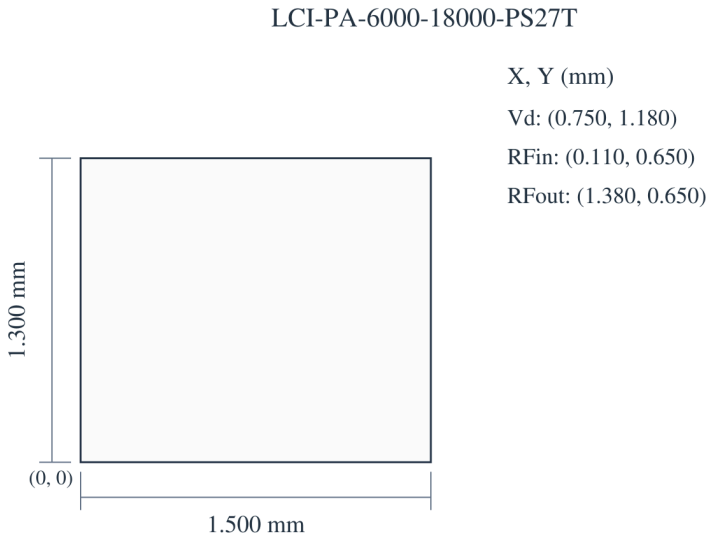
Current publication record · 1.8 · 2026-11-12. Product description or editorial content updated. Replaces revision 1.7.

Bond-pad dimensions

Symbol: RFin; Dimensions (µm): 100 × 150. Symbol: Vd1; Dimensions (µm): 150 × 100. Symbol: RFout; Dimensions (µm): 100 × 150.

Mechanical Outline

Outline and dimensioned coordinates in mm. Use this drawing as a dimensional reference. Fabrication and wire bonding require complete drawings.

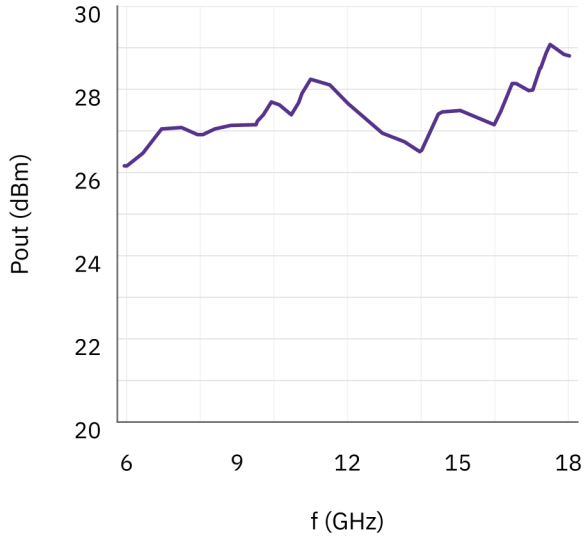


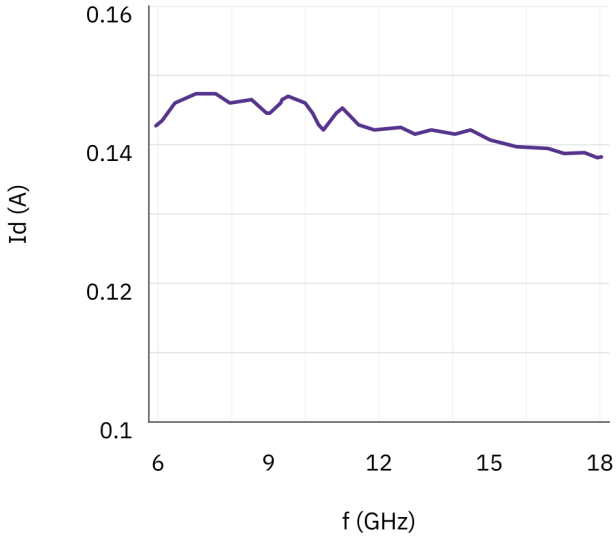
Performance curves

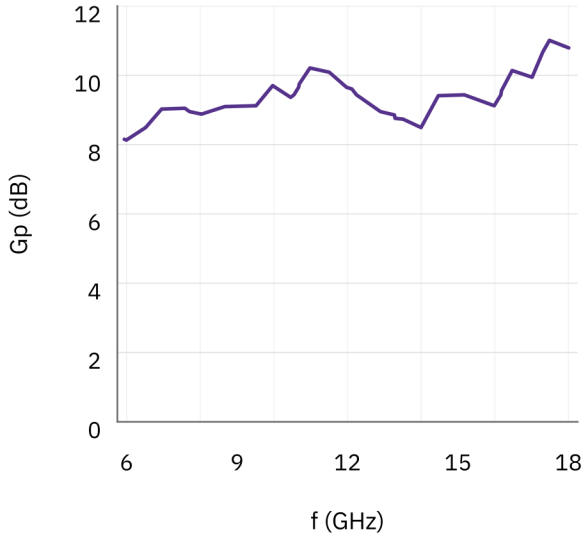
Each performance plot applies to its stated operating conditions.

Continuous wave (CW) — Saturated output power; Dynamic drain current; Power gain.

Figure notes: TA=+25°C; Vd = +28V; Pin=18dBm. Readings are approximate.







Document notice

Specifications are subject to revision. Before design release, confirm the current document revision and product-specific requirements with LCRF. The approved quotation and order documentation define the supplied configuration.